

AMENDMENT TO THE ABSTRACT

Please replace all prior versions of the Abstract with the following new Abstract:

ABSTRACT

Al A directory enabled network element ~~is disclosed, which in one embodiment, is a router, switch, or other network device~~ that has an ~~directory enabling element that is enables~~ configured to querying, accessing, and updating directory information that is managed by a directory service of a network ~~that includes the network element~~. An application programming interface (API) is configured to receive directory services requests from application programs (APs) and provide the directory services requests to the directory enabling element. A locator service is accessible using the ~~application programming interface~~ API and configured to locate servers that provide the directory services ~~in the network~~. A bind service in the directory enabling element is coupled to a security protocol ~~and configured to bind an external application program to the security protocol~~. An event service is configured to receive registration of an event and an associated ~~responsive action~~ from an ~~application~~ AP program, notify the ~~application program~~ AP when the event occurs, and execute the associated responsive action ~~in response thereto~~. ~~As a result, a router, switch, or other~~ The network device can thereby automatically authenticate itself to a directory service ~~and query, access and update information in any directory server of a distributed network~~.